

PRODUCT INFORMATION



15-keto-17-phenyl trinor Prostaglandin F_{2a} ethyl amide

Item No. 10010405

CAS Registry No.: 1163135-96-3

Formal Name: N-ethyl-9a,11a-dihydroxy-15-keto-17-phenyl-18,19,20-trinor-prost-5Z,13E-dien-1-amide

Synonyms: 15-keto Bimatoprost, 15-keto-17-phenyl trinor PGF_{2a} ethyl amide

MF: C₂₅H₃₅NO₄

FW: 413.5

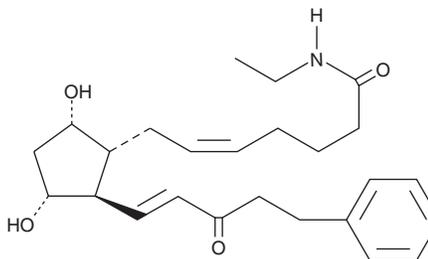
Purity: ≥98%

UV/Vis.: λ_{max}: 234 nm

Supplied as: A solution in methyl acetate

Storage: -20°C

Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

15-keto-17-phenyl trinor PGF_{2a} ethyl amide is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 15-keto-17-phenyl trinor PGF_{2a} ethyl amide in these solvents is approximately 10, 2, and 2.5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 15-keto-17-phenyl trinor PGF_{2a} ethyl amide is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 15-keto-17-phenyl trinor PGF_{2a} ethyl amide in PBS, pH 7.2, is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Bimatoprost is the Allergan trade name for 17-phenyl trinor PGF_{2a} ethyl amide, an F-series PG analog which has been approved for use as an ocular hypotensive drug.¹ Oxidation of the C-15 hydroxyl group produces 15-keto-17-phenyl trinor PGF_{2a} ethyl amide. 15-keto-17-phenyl trinor PGF_{2a} ethyl amide is a potential metabolite of 17-phenyl trinor PGF_{2a} ethyl amide when 17-phenyl trinor PGF_{2a} ethyl amide administered to intact animals. No pharmacological studies on 15-keto-17-phenyl trinor PGF_{2a} ethyl amide have been reported.

References

1. Woodward, D.F., Krauss, A.H.-P., Chen, J., *et al.* The pharmacology of Bimatoprost (Lumigan™). Survey of *Ophthalmology* 45, S337-S345 (2001).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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